

WHAT IS CLAIMED IS:

1. A method of printing over a network, comprising the steps of:

inputting print data to be printed and associated credit card information at a host terminal;

uploading a print job comprising the print data and the associated credit card information from the host terminal to a print data storage server;

inputting credit card information at an input device that communicates with the print data storage server;

transmitting print data having associated credit card information that corresponds to the credit card information input at the input device from the print data storage server to the input device; and

printing the print data on a printing device.

2. A method according to Claim 1, further comprising, after the uploading step and prior to inputting the credit card information at the input device, marking the uploaded print job as ready for printing.

3. A method according to Claim 2, wherein the print data transmitted from the print data storage server to the input device is print data corresponding to the print job that has been marked as ready for printing.

4. A method according to Claim 2, wherein after a predetermined period of time, the marked print job is automatically unmarked.

5. A method according to Claim 4, wherein the automatically unmarked print job is deleted from the print data storage server.

6. A method according to Claim 4, wherein the automatically unmarked print job remains stored in the print data storage server as an unmarked print job.

7. A method according to Claim 1, wherein the credit card information is input at the input device by a credit card reader.

8. A method according to Claim 1, further comprising charging an account associated with the credit card information input at the input device for a cost related to printing of the print data.

9. A method according to Claim 1, further comprising storing the uploaded print data and credit card information in the print data storage server.

10. A method according to Claim 9, wherein the uploaded print data and the credit card information are stored utilizing a cross-reference table.

11. A system for printing over a network, comprising a host terminal, a print data storage

server, a network interface device, and a printing device,

the host terminal, comprising:

an input device that inputs print data to be printed and associated credit card information; and

a transmitter that transmits the input print data and the associated credit card information to the print data storage server;

the print data storage server, comprising:

a receiver that receives the print data and the associated credit card information transmitted by the host terminal, and that receives credit card information from the network interface device; and

a transmitter that transmits to the network interface device, print data having associated credit card information corresponding to the credit card information received by the receiver from the network interface device;

the network interface device, comprising:

a first receiver that receives input credit card information;

a first transmitter that transmits the input credit card information to the print data storage server;

a second receiver that receives the print data from the print data storage server; and

a second transmitter that transmits the received print data to the printing device; and

the printing device, comprising:

a receiver that receives the print data transmitted by the network interface device; and

an image outputting device that outputs an image based on the received print data.

12. A printing device, comprising:  
a receiver that receives print data transmitted over a network;  
an image output device that outputs an image based on the print data received by the receiver;  
an input device that inputs credit card information; and  
a transmitter that transmits the input credit card information over the network to a print data storage server,  
wherein, the print data storage server stores print data and associated credit card information that is uploaded to the print data storage server, and  
wherein, when the input credit card information is transmitted to the print data storage server by the transmitter, the print data storage server transmits print data which has associated credit card information that corresponds to the input credit card information to the receiver.

13. A printing device according to Claim 12, wherein the input device comprises a credit card reader.

14. A printing device, comprising:  
an image output device that outputs an image based on print data received by the printing device;  
a memory that stores executable process steps; and

a processor that executes the executable process steps, the executable process steps comprising (a) receiving input credit card information, (b) transmitting the input credit card information to a print data storage server, (c) receiving print data from the print data storage server, wherein the received print data is print data which is uploaded to the print data storage server with associated credit card information and, wherein the received print data has associated credit card information that corresponds to the input credit card information, and (d) outputting an image based on the received print data.

15. A server apparatus, comprising:

a first receiver that receives print data and associated credit card information from a host terminal;

a storage medium that stores the print data and the associated credit card information;

a second receiver that receives credit card information from a credit card input device;

a processor that determines whether the received credit card information received by the second receiver corresponds to the associated credit card information stored in the storage medium; and

a transmitter that transmits print data stored in the storage medium that has associated credit card information corresponding to the credit card information received by the second receiver to the credit card input device.

16. A server apparatus, comprising:

a memory that stores executable process steps; and

a processor that executes the executable process steps, wherein the executable process steps comprise (a) a first receiving step of receiving print data and associated credit card information from a host terminal, (b) storing the received print data and the associated credit card information, (c) a second receiving step of receiving credit card information from a credit card input device, (d) a determining step of determining whether the credit card information received in the second receiving step corresponds to the associated credit card information stored in the storing step, and (e) transmitting stored print data that has associated credit card information corresponding to the credit card information received in the second to receiving step to the credit card input device.

17. Computer-executable process steps for printing over a network, comprising the steps of:

a first input step of inputting print data to be printed and associated credit card information;

uploading a print job comprising the print data and the associated credit card information input in the first input to a print data storage server;

a second input step of inputting credit card information at an input device that communicates with the print data storage server;

transmitting print data having associated credit card information that corresponds to the credit card information input in the second input step from the print data storage server to the input device; and

printing the print data on a printing device.

18. Computer-executable process steps according to Claim 17, further comprising, after the uploading step and prior to the second input step, marking the uploaded print job as ready for printing.

19. Computer-executable process steps according to Claim 18, wherein the print data transmitted from the print data storage server to the input device is print data corresponding to the print job that has been marked as ready for printing.

20. Computer-executable process steps according to Claim 18, wherein after a predetermined period of time, the marked print job is automatically unmarked.

21. Computer-executable process steps according to Claim 20, wherein the automatically unmarked print job is deleted from the print data storage server.

22. Computer-executable process steps according to Claim 20, wherein the automatically unmarked print job remains stored in the print data storage server as an unmarked print job.

23. Computer-executable process steps according to Claim 17, wherein the credit card information is input at the input device by a credit card reader.

24. Computer-executable process steps according to Claim 17, further comprising charging an account associated with the credit card information input at the input device for a cost related to printing of the print data.

25. Computer-executable process steps according to Claim 17, further comprising storing the uploaded print data and credit card information in the print data storage server.

26. Computer-executable process steps according to Claim 25, wherein the uploaded print data and the credit card information are stored utilizing a cross-reference table.

27. A computer-readable medium which stores computer-executable process steps for printing over a network, the computer-executable process steps comprising:

a first input step of inputting print data to be printed and associated credit card information;

uploading a print job comprising the print data and the associated credit card information input in the first input to a print data storage server;

a second input step of inputting credit card information at an input device that communicates with the print data storage server;

transmitting print data having associated credit card information that corresponds to the credit card information input in the second input step from the print data storage server to the input device; and



printing the print data on a printing device.

28. A computer-readable medium according to Claim 27, further comprising, after the uploading step and prior to the second input step, marking the uploaded print job as ready for printing.

29. A computer-readable medium according to Claim 28, wherein the print data transmitted from the print data storage server to the input device is print data corresponding to the print job that has been marked as ready for printing.

30. A computer-readable medium according to Claim 28, wherein after a predetermined period of time, the marked print job is automatically unmarked.

31. A computer-readable medium according to Claim 30, wherein the automatically unmarked print job is deleted from the print data storage server.

32. A computer-readable medium according to Claim 30, wherein the automatically unmarked print job remains stored in the print data storage server as an unmarked print job.

33. A computer-readable medium according to Claim 27, wherein the credit card information is input at the input device by a credit card reader.

34. A computer-readable medium according to Claim 27, further comprising charging an account

associated with the credit card information input at the input device for a cost related to printing of the print data.

35. A computer-readable medium according to Claim 27, further comprising storing the uploaded print data and credit card information in the print data storage server.

36. A computer-readable medium according to Claim 35, wherein the uploaded print data and the credit card information are stored utilizing a cross-reference table.

37. A method of printing a print job, comprising the steps of:

swiping a credit card through a credit card reader at a printing device; and

in response to the swiping, the printing device printing a print job which has associated credit card information corresponding to the swiped credit card.

38. A method according to Claim 37 further comprising the steps of:

in response to the credit card swiping, the printing device transmitting the credit card information to a print data storage device which stores print jobs having credit card information associated therewith; and

the print data storage server transmitting to the printing device a print job having associated credit card information corresponding to the credit card information transmitted by the printing device.

39. A method according to Claim 38, wherein the print jobs stored in the print data storage server are uploaded to the print data storage server together with the associated credit card information.

40. A method according to Claim 1, wherein the credit card information is input at the input device utilizing a keypad.

41. A method according to Claim 1, wherein the credit card information is input at the input device via a wireless transmission from a portable device.

42. A printing device according to Claim 12, wherein the input device is a keypad.

43. A printing device according to Claim 12, wherein the input device is a receiver that receives a wireless transmission from a portable device.

44. Computer-executable process steps according to Claim 17, wherein the credit card information is input at the input device utilizing a keypad.

45. Computer-executable process steps according to Claim 17, wherein the credit card information is input at the input device via a wireless transmission from a portable device.

46. A computer-readable medium according to Claim 27, wherein the credit card information is input at the input device utilizing a keypad.

47. A computer-readable medium according to Claim 27, wherein the credit card information is input at the input device via a wireless transmission from a portable device.

48. A method of printing over a network, comprising the steps of:

inputting print data to be printed and associated credit card information at a host terminal;

uploading a print job comprising the print data and the associated credit card information from the host terminal to a print data storage server;

a first encrypting step of the print data storage server performing an encryption process on the associated credit card information and storing a first resultant value with the print data;

inputting credit card information at an input device that communicates with the print data storage server;

a second encrypting step of the input device performing an encryption process on the input credit card information to obtain a second resultant value;

a first transmitting step of the input device transmitting the second resultant value to the print data storage server;

a second transmitting step of the print data storage server transmitting print data having a first resultant value that corresponds to the second resultant value to the input device; and

printing the print data on a printing device.

49. A method according to Claim 48, wherein the first encrypting step and the second encrypting step comprise a same encryption process.

50. A method according to Claim 49, wherein the encryption process comprises a secure hashing algorithm.

51. A method of printing over a network, comprising the steps of:

inputting print data to be printed and associated credit card information at a host terminal;

uploading a print job comprising the print data and the associated credit card information from the host terminal to a print data storage server;

inputting credit card information at an input device that communicates with the print data storage server;

a first transmitting step of transmitting the credit card information input in the inputting step to the print data storage server;

a second transmitting step of the print data storage server transmitting data indicative of at least one pending print job that corresponds to the credit card information transmitted in the first transmitting step;

displaying a listing of pending print jobs based on the data transmitted in the second transmitting step;

selecting at least one print job from the listing displayed in the displaying step;

a third transmitting step of transmitting data indicative of the at least one print job selected in the selecting step;

a fourth transmitting step of transmitting print data corresponding to the at least one selected print job to the input device; and

printing the print data on a printing device.